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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/296,928 04/22/99 CERNI

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EXAMINER

024283 MM92/0926
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PHAN H
ART UNIT

PAPER NUMBER

2877
DATE MAILED:

09/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/296,928

Applicant(s)
Cerni et al.

Examiner
Hoa Q. Pham

Group Art Unit
2877



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-33 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-33 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3 and 4

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Drawings

1. The drawings filed on 4/22/99 are objected as indicated on attached PTO-948.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-33 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of copending Application No. 09/069,682. The different between the present claimed invention and the copending application in that the particle size distribution is determined on the basis of changing of the slope; however, such a feature is known in the art, for example, indicated by applicant in page 28 lines 15-16. Thus, it would have been obvious to include in copending applicant additional step of determining

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the particle size distribution because this is a known method which is known to serve for the purpose of copending application of determining the particle size distribution.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gouesbet (U.S Pat. 4,373,807).

Claims 1-4 are read on the teachings of Gouesbet. See figure 3, column 1 lines 43-49, column 3 lines 11-16, column 5 lines 35-45, column 7 lines 11-27, column 8 lines 36-43.

6. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Freud et al (U.S Pat. 5,485,270).

Claims 1 and 11 are read on the teachings of Freud et al (of record). See column 1 line 5-15 and column 5 lines 23-47.

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7. Claims 26, 29, 30 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogino (U.S Pat. 5,422,712).

The limitations of claims 26, 29, 30 and 33 are read on the teachings of Ogino. See figure 1, column 1 lines 1-21, column 4 lines 16-24, column 5 lines 17-27.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-16, 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gouesbet in view of Ferri (XP-000685215), Loos (4,338,030), Lundqvist et al (4,318,180), Niwa (5,379,113) and Anatoli et al (XP-000685510).

Regarding claims 5-7; the step of determining a slope of a logarithmic of transmission as a function of the wavelengths is well known in the art, for example as stated by applicant in page 28 lines 15-16; thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to include such step into the invention of Gouesbet for the purpose of determining the particle size distribution.

Regarding claims 8-9 and 15; Ferri et al (of record) discloses a commercial spectrophotometer for particle sizing in which the spectrophotometer is operated between 0.3 and

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1.1 μm (page 885, right hand column, lines 27-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wavelength range between 0.3 and 1.1 μm taught by Ferri et al into the invention of Gouesbet. The rationale for this modification would have arisen from the fact that using such range of wavelengths would detect the diameter of the particles within the range of 0.6 and 2.8 μm .

Regarding claims 10-14; it would have been obvious matter of design choice to modify the Gouesbet reference by having the diameter of the radiation between 100-200 microns, since the applicant has not disclosed that having such diameter would solve any specific problem or for any particular purpose.

Regarding claims 16 and 18; Loos, from the same field of endeavor, teaches the use of filters or grating for selecting different wavelengths (column 12 lines 12-21 and column 13 lines 8-12); thus it would have been obvious to one have ordinary skill in the art at the time the invention was made to replace the first, second laser beams and filter of Gouesbet by a grating or filters of Loos for the purpose of separating different wavelengths because they would function in the same manner.

Regarding claim 19; Lundqvist et al teaches that a warning signal is provided when the fractional proportions measured are within the limit values (column 1 line 65 through column 2 line 2). Thus, it would have been obvious to one having ordinary skill in the art to include in Gouesbet a warning signal as taught by Lundqvist et al, thus an accuracy of the measurement is obtained.

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Regarding claims 20-22; Niwa teaches the comparison between the reference transmission in memory and a measured transmission and the particle size information is obtained on the basis of the comparison (figures 1, 2 and 5). Thus for the purpose of determining the particle size distribution, it would have been obvious to one having ordinary skill in the art to include in Gouesbet a comparison step as taught by Niwa.

Regarding claims 23-25; Anatoli et al (of record) teaches the use of Mie theory (page 1363, left-hand column lines 19-23) for determining the particle size; it would have been obvious to replace the method of Gouesbet by the method of Anatoli for the same purpose of determining the particle size distribution. Such a substitution for each other is generally recognized as being within the level of ordinary skill in the art.

10. Claims 27-28 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino in view of Loos and Niwa.

Regarding claims 27 and 28; Loos, from the same field of endeavor, teaches the use of filters or grating for selecting different wavelengths (column 12 lines 12-21 and column 13 lines 8-12); thus it would have been obvious to one have ordinary skill in the art at the time the invention was made to replace the first, second laser beams of Ogino by a grating or filters of Loos for the purpose of separating different wavelengths because they would function in the same manner.

Regarding claims 31-32; Niwa teaches the comparison between the reference transmission in memory and a measured transmission and the particle size information is obtained on the basis

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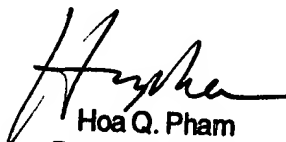
of the comparison (figures 1, 2 and 5). Thus for the purpose of determining the particle size distribution, it would have been obvious to one having ordinary skill in the art to include in Ogino a comparison step as taught by Niwa.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Hoa Pham whose telephone number is (703) 308-4808. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722 or 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pham/hp

September 22, 2000


Hoa Q. Pham
Primary Examiner